1

2

3

4

5

6

7

8

1

2

3

4

5

6

7

1

2

3

4

5

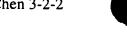
6

7

8

1

2



## What is claimed is

	1.	Α	method	of	establishing	a	quality	of	service	session	between	a
cor	responden	t noc	de and a r	nob	ile node, the r	nol	oile node	hav	ing a hor	ne addres	ss in a hon	ne
network and being temporarily connected at a care-of address in a foreign network, the												
me	thod comp	risir	ng the step	os o	f:						•	

generating, in the foreign network, a modified reply message having a source address of the mobile node's care-of address and a destination address of the correspondent node; and

transmitting the modified reply message.

2. The method of claim 1, further comprising the steps of:

receiving, in the home network, a request message having a source address of the correspondent node and a destination address of the mobile node's home address;

creating a modified request message by replacing the destination address of the request message with the mobile node's care-of address; and

transmitting the modified request message to the foreign network, whereby the modified reply message is generated responsive to the modified request message.

## 3. The method of claim 2, wherein

the step of generating the modified reply message is carried out by proxy device in the foreign network, the proxy device being associated with the mobile node; and

further comprising the steps of:

responsive to receipt of the modified request message at the proxy device, sending a quality of service indication signal to the mobile node, whereby the modified reply message is generated responsive to receipt of a quality of service acknowledgment from the mobile node.

## 4. The method of claim 2, wherein

the quality of service session is an RSVP session;

1

1

2

3

4



	A. Chen 3-2-2
3	the request message is a Path message; and
4	the modified reply message is a Reservation message.
1	5. The method of claim 1, further comprising the steps of:
2	receiving, in the home network, the modified reply message;
3	creating a further modified reply message by replacing the source address with the

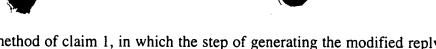
- mobile node's home address; and 4 transmitting the further modified reply message. 5
- 6. 1 The method of claim 5, wherein the correspondent node generates the 2 request message and receives the further modified reply message.
  - 7. The method of claim 5, wherein:
- the correspondent node is associated with a correspondent proxy device, whereby: 2
- 3 the correspondent proxy device generates the request message responsive
- 4 to a quality of service request from the correspondent node; and
- 5 the correspondent proxy device generates a quality of service confirmation
- 6 responsive to receipt of the further modified reply message.
- 8. 1 The method of claim 1, wherein the step of generating the modified reply 2 message is carried out in the mobile node.
  - 9. The method of claim 1, wherein the step of generating the modified reply message comprises:
  - generating a reply message having a source address of the mobile node's home address and a destination address of the correspondent node; and
- 5 replacing the source address with the mobile node's care-of address, thereby
- 6 generating the modified reply message.

6

7

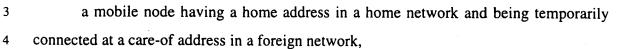
8





- 1 10. The method of claim 1, in which the step of generating the modified reply
  2 message is carried out by a proxy device in the foreign network, the proxy device being
  3 associated with the mobile node.
- 1 The method of claim 1, wherein
- the quality of service session is an RSVP session; and
- the modified reply message is a Reservation message.
- 1 12. A mobile IP environment capable of supporting a quality of service 2 session, comprising:
- a correspondent node;
- a mobile node having a home address in a home network and being temporarily connected at a care-of address in a foreign network,
  - a proxy device, in the foreign network, the proxy device associated with the mobile node for generating a modified reply message having a source address of the mobile node's care-of address and a destination address of the correspondent node.
- 1 13. The mobile IP environment of claim 12, wherein the proxy device is located in the mobile node.
- 1 14. The mobile IP environment of claim 12, wherein the proxy device is located outside the mobile node and coupled to the mobile node.
- 1 15. The mobile IP environment of claim 12, wherein:
- the quality of service session is an RSVP session;
- the modified reply message is a Reservation message.
- 1 16. A system capable of supporting a quality of service session, comprising:
- 2 a correspondent node;





- a proxy device, in the foreign network, the proxy device associated with the mobile node for generating a modified reply message having a source address of the mobile node's care-of address and a destination address of the correspondent node.
- 1 The system of claim 16, wherein the proxy device is located in the mobile 2 node.
- 1 18. The system of claim 16, wherein the proxy device is located outside the mobile node and coupled to the mobile node.
- 1 19. The system of claim 16, wherein:
- the quality of service session is an RSVP session;
- the modified reply message is a Reservation message.